tation whatever. Most of the other methods tried have drawbacks. The silk prepared by this method does not give any trouble. Aside from transplanting the tendon one can sometimes make a stay or brace with silk from the periosteum of the leg through some of the bones in the foot. If we had the tibialis paralyzed one could put a silk stay from the tibia to the internal cuneiform bone, planting at both ends the suture in the periosteum. That serves to hold the foot in position and acts very well to prevent deformity. In all operations it is absolutely necessary to over-correct your deformity. This helps in several ways. We all know that many of these muscles are only partially paralyzed and weakened on account of the position of the foot. Over-correcting this allows new life to come back and that taken with transplantation helps it very well. With regard to the time of operation, as Dr. Watkins says, one year is the time to begin and that is pretty hard to determine. Certainly I should not operate under one year after the onset of the paralysis. I am at present treating a case paralyzed 1½ years ago which is still improving and probably will improve for some time yet. When to operate is pretty hard to tell but certainly not under a year. Sometimes bone operations coupled with muscle implantation can be done to good advantage and I have known several instances in which that works very nicely. Suppose there were calcaneous deformities, calf-muscles paralyzed, one can remove the astragalus and push the leg forward on the foot and give a good, solid foundation and one can get along without the need of a brace afterward. Another bone operation works out where the quadriceps is paralyzed and we want to transplant the biceps—and that is to do an osteotomy in the femur making a backward bend best above the knee and allow the patient to stand on the leg and this gives the transplanted muscles better chance to work.

Dr. R. L. Wilbur, closing: Dr. Hunkin's discussion has shown us that there are many cases of this disease constantly occurring. The principal object in bringing my paper before you was to emphasize the importance of early diagnosis for the protection of the individual and the community and to encourage early rest and proper care, in the hope that as time goes on the consequences of the disease may be avoided in the individual and the spread of it controlled in the community.

Dr. J. T. Watkins, closing: I presaged my paper by saying that it must necessarily be incomplete. Still I tried to get in all I could on this subject in the time allotted to me. The members of the Alameda County Medical Society will remember that I read a paper before them on infantile paralysis and not being limited for time I made the same contention that the doctor has as to the importance of protecting the joints during and after an attack of infantile paralysis. Lange has emphasized that. With regard to the manner of attaching the silk tendon, the point is to attach it in such a way that it will hold. The manner of attachment may vary with the individual. I have no objections, of course, to Dr. Hunkin's nautical knots. As to the best time to operate please note that I specifically said if you can control the conditions surrounding your patient one year after beginning a systematic protracted conservative treatment is the inside limit. I have not thus far had to undo anything I had done in an operative way. I do not think such an eventuality will arise if the operation plan is prepared properly. So far as silk ligaments are concerned I did not have time to speak at length of them in the abstract of my paper. You will find them considered somewhat fully in the published paper, however. It gives me pleasure to say that I thoroughly agree with the procedure of which Dr. Milton spoke.

SOCIETY REPORTS

CALIFORNIA ACADEMY OF MEDICINE.

The California Academy of Medicine held its regular meeting on Monday evening, September 23rd, in the rooms of the County Medical Society.

The following scientific program was given:

1. (A) A Suggestion in the Surgical Treatment of Tic Douloureux of the Inferior Dental Nerve.

(B) Treatment of Oblique Spiral Fractures of the Tibia. Charles G. Levison. Discussed by R. L. Wilbur, Sol. Hyman, S. J. Hunkin and C. G. Levison.

2. Observations on the Anatomy of the New-Born. A. W. Meyer. Discussed by W. Ophuls, W. F. Schaller and A. W. Meyer.

W. F. Schaller and Jean V. Cooke were elected to membership.

Refreshments were served at the close of the meeting.

NEVADA STATE SOCIETY.

The annual meeting of the Nevada State Medical Society closed with a banquet on the night of October 9th. The meeting was an unusually good and well attended one. The newly-elected officers are as follows: President, M. R. Walker; Vice-President, A. P. Lewis; Second Vice-President, P. J. Mangan; Secretary, M. A. Robison; Delegate to the A. M. A., B. F. Cunningham; Alternate, M. A. Robison.

ORANGE COUNTY.

The meeting of the Orange County Medical Society for October was held at Santa Ana and the subject of Racial Betterment was the principal topic of discussion with strong resolutions on the proper control of marriage licenses as an outcome. A committee consisting of Drs. J. F. Doyle, H. A. Johnston and A. H. Domann was appointed to cooperate with other societies.

SAN JOAQUIN VALLEY SOCIETY.

The Thirty-third meeting of the San Joaquin Valley Medical Society was held at Merced, October 8th, under the genial guidance of Dr. Hildreth, its President. The program was as follows: Personal Experiences with Bacterines, by W. W. Cross; Epidemic Poliomyelitis, by Philip King Brown; Continued Report on Gall Bladder Sections, by T. C. Rosson; Report of a Case of Splenectomy, by H. Kylberg; The Future Outlook for the Medical Profession as Affected by Legislation, by J. H. Parkinson. In the evening a banquet was tendered to all those in attendance by the physicians of Merced.

SANTA CRUZ COUNTY.

The September meeting of the Santa Cruz County Medical Society was held at the office of Dr. E. E. Porter at Watsonville and was largely attended. Matters of business interest, illegal practitioners, etc., were largely discussed.

SONOMA COUNTY.

The Sonoma County Medical Society held its meeting for October on the afternoon of the 10th at the State Hospital at Eldridge, where the meeting was in the nature of a clinical one, followed by refreshments and a social session.

BOOK REVIEWS

Elementary Bacteriological and Protozoology: the Microbiological Causes of the Infectious Diseases. By Herbert Fox., M. D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania. 12mo, 237 pages, with 67 engravings and 5 colored plates. Cloth, $1.75, net. Lea & Febiger, Philadelphia and New York, 1912.

As the author's preface states this is a work for

the nurse and the beginner. It would be well to add for the layman and high school student, for it is certainly elementary enough to be of real service. H. R. O.

The Collected Works of Christian Fenger. Vol. I and II. 1840-1902. Saunders Company, Phila. 1912.

These two volumes include the English and Danish publications of Dr. Fenger. The latter are translated. One article alone, written during his residence in Cairo, is in French. The large range of topics covered testifies as to the wide interests of the great Danish-American surgeon. The papers on genito-urinary subjects are particularly valuable. Many surgical principles set forth on this as well as on other topics have since the time of publication been universally adopted. Not the least valuable is a most interesting autobiography telling of a career full of obstacles and opposition but through which, as these works testify, his love of progressive scientific medicine must have remained undiminished. H. C. N.

Practical Anatomy. A Guide to the Dissection of the Human Body. By John C. Heisler, M. D., Professor of Anatomy in the Medico-Chirurgical College of Philadelphia, Pa. Pp., 790, with 366 illustrations, of which 225 are in color. Price, $4.50.

This book is a treatise on dissection and gross anatomy from a topographical point of view. The author has included under the title Practical Anatomy, not only useful facts applicable to dissection and descriptive anatomy, but also those relating to medicine, surgery, and the various specialties,—the latter being what are preferably comprehended under the name of applied anatomy. The points of clinical interest are abundant and concisely presented.

In the preface the author gives his reasons for the character of the work and for the particular arrangement of the subject matter. A warning is given that the "work in no sense attempts to usurp the function of a text-book of descriptive anatomy."

The cadaver is divided into four "parts" and it logically follows that four chapters should be devoted to the consideration of the essential anatomical and practical facts. An introduction is set apart to the technic of dissection. The instructions given will be appreciated by the student who works on his own initiative. Seven photographic illustrations are given to elucidate the text.

In each chapter the regions of the part of the body under consideration are taken up in a rational succession and the details of each are presented in the order of dissection. An effort has been made to preserve the logical arrangement of the subject and it is expected that the order of the work will be varied in each individual case, according to the requirements and object in view. The presentation of the text matter permits freedom of choice on the part of the student.

It is recommended that before the dissection is undertaken a review be made of the salient characteristics of each bone involved in the region under contemplation. The bones are figured and properly lettered, and the areas of muscular attachment are indicated in color. A study of the surface anatomy—which includes surface form and landmarks—precedes the consideration of the dissection. Then follows, in the regular order of occurrence, the removal of the integument, superficial fascia, cleaning of the superficial vessels and nerves, deep fascia, finally the muscles and deep vessels and nerves. For each muscle the essential facts of origin, insertion, nerve-supply and action are considered. An analogous treatment is accorded the main arteries and veins; the important anastomoses formed by them receive attention. The most common variations are briefly mentioned. The joints, ligaments, bursae and synovial sheaths, lymphatics and the areas drained by them, receive the attention which their importance demands.

The practical importance of each anatomical fact has been interpolated at the proper time and place. Therefore, any point of special clinical interest is mentioned in connection with the structure under consideration. In order that "the beginner may not be unduly distracted, however, by an over-abundance of such references, they have been set apart from the body of the text by presentation in smaller type." It is the opinion of the reviewer that this segregation will all the more strongly fix the attention of the student upon the facts presented.

The figures have for the most part been made from the author's dissections or under his direct supervision. Many of them lack distinctness and the relationship of the structures are obscured by the colors not having fallen into their proper places. A few of the figures are disappointing as to correctness. In figure 24 the medial anterior thoracic nerve should have been indicated so as to have been compared with the lateral anterior thoracic.

In figure 27 the lateral cutaneous branch or intercostobrachial nerve from the third intercostal nerve is made to pass beneath the subscapular artery. This same relation is shown in figure 1093 of Piersol's Anatomy. Most text-books are obscure on the relationship of this nerve. Figure 67 of Woolsey's Applied Surgical Anatomy gives the relations of the intercostobrachial nerves correctly and as observed by the reviewer in his dissections and class work. A very obvious error is committed in figure 81, where the posterior cutaneous nerve of the thigh (small sciatic) is represented as lying superficial to the fascia lata in the upper and posterior part of the thigh. Again, in figure 163 the parotid duct is lettered as the buccal nerve, at least from the large size and position of the structure it is considered that an error has been permitted to go uncorrected. The genito-femoral nerve is colored red in figure 297.

It is true that an author finds it difficult to keep a work of the present character within desirable limits without omitting some important facts in the abridgment. Some omissions are less pardonable than others; an instance may be cited. On page 631, where the peritoneum is traced in a sagittal section of the body, no mention is made of its relation to the vagina. It would have been much better to have stated that the peritoneum is reflected from the anterior surface of the rectum onto the upper and posterior fourth of that organ, before attaining the posterior surface of the uterus. At this particular time such an omission is apt to lead the student into error. The correct relations are given on page 711.

Although the Basle Anatomical Nomenclature has not been adopted in its entirety, it is very gratifying to find the "BNA terms used directly in many cases," and the only regret is, that they have not been more extensively adopted; especially for such structures as the axillary, radial, and femoral nerves, etc., and the old terms circumflex, musculospiral, and anterior crural nerves, etc., given in parentheses. In the interest of advancement this should have been done. All progressive and up to date students or physicians would have accepted the new order of things, and the book itself would have a greater value in teaching.

The typography is excellent. The subheadings are given in heavy black-faced type, so that they are recognizable at a glance. The publishers deserve credit for the neatness of the book and for the elimination of typographical errors, for none of any moment have been noted except those pertaining to the figures.

The book in its logical arrangement and concise statement of facts should find a useful place within the sphere for which the author intended it.

F. E. B.